## Freshwater Sediment Quality Values Technical Report Pete Rude Comments Submitted May 14, 2010

1. Executive Summary. The fourth goal of the report is "Obtain consensus among the RSET agencies on how the SQG calculations and reliability analysis should be conducted, along with the final values". Can you refresh me on Ecology's ultimate goal on SQGs in light of the Sediment Evaluation Framework (SEF)? Is the intent/hope that the freshwater SQS/CSL analyte list and criteria that end up in the SMS are the same as those in the SEF? (Also, what is the equivalent intent for the biological tests used and related endpoints/criteria?)

## 2. Table ES-1. Recommended Sediment Quality Guidelines:

- O There are obvious differences between the Table ES-1 analyte list and the marine standards chemical criteria list. The report discusses some of these differences obliquely (e.g., TPAH vs. individual PAHs), but there is no general discussion of the differences and why they exist. If the FW SQGs are promulgated in some form, what will the ramifications be of having different analyte lists in the two parts of the revised SMS? Some sort of policy statement or discussion might be helpful. The report describes well why there is no TOC normalization, and it seems like a discussion of how the analyte list was developed and what it means in the context of the existing marine chemical criteria is in order.
- What would be the standard suite of chemical tests to address the SQG analytes? I see at least the following if a full suite is called for:
  - Metals
  - SVOCs
  - PCBs
  - Organotins
  - TPH (two methods)
  - Conventionals (ammonia, total sulfides, and probably TOC)
  - Grain size

I'm assuming that the rule (or related guidance) will state that testing would only be done when there is reason to believe the analytes might be present? Is that Ecology's expectation? Will there need to be a special analysis for the pesticides on the list?

- Are the SQS levels identified on the table likely to lead to detection limit issues for some of the analytes? If so, it would be good to communicate that and help parties prepare.
- Conventional Pollutants (i.e., ammonia and total sulfides) make the recommended list. Are we really ready to have an SQS for these chemicals? What is the typical natural concentration of these chemicals in freshwater sediments? Did RESET do some background work on why these should be included? Will the FW SQGs rule include the "Nonanthropogenically affected sediment quality criteria" language that is included for the marine standards? It just seems like there is the potential for confusion and extra work/analysis if typical natural levels of ammonia and sulfides are anywhere near the proposed SQS.

- o The addition of TPH is also of potential concern. My understanding is that some natural materials can result in a detection of TPH. Are there enough data available to understand the typical levels of TPH that we might find in unimpacted areas? And, how would the SQS compare to that level?
- 3. **Section 2.1.5 Bioassay Tests and Endpoints.** What freshwater biological tests and endpoints are Ecology actually considering be included in the revised rule? Is the plan to follow the marine regulation 2-acute/1 chronic approach?
- **4. Section 2.3 Reliability Analysis.** Where did the reliability goals shown in Table 2-3 come from? Has Ecology already approved of them? How do they compare to the goals set for the marine standards?